

Using the target costing technique in implementing cost leadership strategy

An applied study at the State Company for Rubber Industries

Extracted search

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المستخلص :

تعد تقنية التكلفة المستهدفة من بين اهم التقنيات الحديثة للمحاسبة الادارة الاستراتيجية التي ظهرت في اليابان او اخر القرن الماضي، اذ يهدف البحث الى دراسة تقنية التكلفة المستهدفة التي تتناسب مع متطلبات بيئة التصنيع الحديثة بالشكل الذي يساعد الوحدة الاقتصادية في تنفيذ استراتيجية قيادة التكلفة، وقد تم طرح فرضية البحث حيث ان استعمال تقنية التكلفة المستهدفة يمكن ان يساعد الوحدة الاقتصادية في تنفيذ الاستراتيجيات التنافسية ومنها استراتيجية قيادة التكلفة، وقد تم تطبيق البحث في الشركة العامة للصناعات المطاطية للمنتوج الاطار السلبي حجم (1200-24)، واخيراً فقد توصل البحث الى مجموعة من الاستنتاجات وكان من اهمها ان تقنية التكلفة المستهدفة هي احدى تقنيات ادارة الكلفة الاستراتيجية التي تهتم بتخطيط وادارة التكاليف، حيث يكون سعر بيع المنتج هو الموجه للتكلفة من خلال التركيز على الزبون ورغباته .

Abstract :

The target cost technique is considered as the most important modern techniques of strategic management accounting which has been emerged in Japan at the end of the last century. The research aims to study the target cost technique that suits the requirements of the modern manufacturing environment in a way that helps the economic unit implement the cost leadership strategy, and a hypothesis has been put forward research as the use of target cost technology can help the economic unit in implementing competitive strategies, including the cost leadership strategy, and the research was applied in the General Company for Rubber Industries for the product wire

frame size (24-1200), and finally the research reached a set of conclusions and it was from The most important of which is that the targeted costing technique is one of the strategic cost management techniques that is concerned with planning and managing costs, where the selling price of the product is the guiding cost by focusing on the customer and his desires, Among the research methods are the inductive method and the deductive method , Among the most important conclusions reached by the research are 5. Most of the raw materials that enter into the tire industry are imported materials at a very high cost, which negatively affects the high production costs.

An Introduction :

The modern manufacturing environment has been accompanied by many successive developments such as scientific and technological development and the adoption of modern methods and techniques in managing and reducing costs, as well as the characterization of this environment by intense competition between economic units, and accordingly, under these circumstances, economic units are looking for how to remain in the market and the continuity of their activity and development, and this It must improve and develop methods of pricing its products in order to be able to ensure continuity in the market with the acquisition of new markets, and among these technologies are the target cost technology and the continuous improvement technique

The target cost technique seeks to achieve customer satisfaction by focusing on quality and appropriate price and achieving the objectives of the economic unit through achieving profits and sweeping markets and the permanence of its competitive advantage. On the selling price, focus on the customer, product design, and the presence of an integrated team committed to applying this technology. The application of the target cost technology allows the practice of cost management in the early stages of product development, and these practices continue during the product life cycle through effective dealing with the value chain. This technology is considered the tool necessary to meet the needs of customers and increase the value provided to them, as most companies adopt specific strategies represented by a set of long-term plans and procedures that ensure their survival and success process. If there are many competitive strategies that can be used, the cost leadership strategy has been adopted that focuses on low costs and quality as well as other strategies, The research problem is that the Iraqi economic units suffer from many problems, and these problems were the result of the dependence of these units on the traditional approach to managing and reducing costs Therefore, the Iraqi economic units must apply modern administrative and cost techniques, such as the target cost technique, in order to address these problems and implement competitive strategies in the required manner , As for the research hypothesis The use of the target cost technique can help economic units in the implementation of competitive strategies, including the strategy of cost leadership in a manner that is commensurate with the changes .

The first topic: research methodology

The Research's Problem :

Iraqi economic units suffer from many problems, These problems were the result of these units' reliance on the traditional approach to managing and reducing costs, despite the presence of the modern approach represented by the strategic approach. To manage and reduce the cost that global economic units follow, as a result, the Iraqi economic units have borne the negative effects as a result of adopting the traditional approach these effects are represented by the high costs of its products as well as the low quality compared to other competing products. Therefore, the Iraqi economic units must apply modern costly and administrative techniques such as the target cost technique in order to address these problems and implement competitive strategies in the required manner.

1.2 The Research Objectives :

The research aims to study an important application of strategic cost management techniques, which is the target cost technique, which is commensurate with the requirements of the modern manufacturing environment, in a way that helps economic units in implementing the cost leadership strategy.

1.3 The Research hypothesis :

The use of target cost technique can assist economic units in implementing competitive strategies, including the cost leadership strategy, in a manner that is commensurate with the changes and developments accompanying the modern manufacturing environment.

1.4 The Research sample :

The financial and cost reports and data were relied upon in the same factory for the research for the year 2016 because it is closest to the current reality of the laboratory's performance from other previous years in order to fulfill the requirements of the application side of this research.

The second topic: the theoretical framework for research

2.1 The concept of target costing technique

The target costing technique is a completely different process from the traditional perspective, whether in terms of thought or application in terms of product design and pricing, identification and cost management, that is, it is considered an integrated process, as its application requires the use of modern and traditional cost management methods in addition to production, marketing and engineering techniques (Kocsoy). (Et.Al., 2008: 79).

Where (Horngren) and others defined it as that integrated system that is dependent on cost management as it is used when designing a new product or when developing an earlier product (Horngren, Et.Al, 2006: 37).

2.2 The importance of the target costing technique :

The importance of the target costing technique emerges from its being considered an effective planning and control management as well as a set of strategic cost management techniques in a competitive business environment, and the importance can be summarized in the following points:

1. The target costing technique is one of the cost management techniques that helps in implementing competitive strategies that help in achieving economic goals related to planning, control and production (Filomena,Et.Al.,2009:92)
2. Cost reduction starting from the product planning and design stage and ending with the after-sales services phase (Wael, 2014: 172).
3. The target cost technique helps to identify and control the costs of the product life cycle and identifies areas and opportunities to reduce the target cost substantially by matching the design of product specifications according to the desires and needs of customers (Jiambalvo, 2007; 306-307).
4. The target cost technique predicts the required costs of the product and prepares the production within its limits. (Cokins, 2003: 78)
5. The target costing technique helps in reducing costs during the early stages of product design and development, and that cost reduction is a strategic goal that helps in achieving competitive advantage (Rattray, Et.Al., 2007: 8).

3.2 Principles of Target Cost Technique :

There are seven principles of target costing technology, the most important of which are:

The first principle: Price Led Cost:

In the target costing technique, the target price at which the product can be sold in the market and the customer is willing to pay it is determined first, and then the

target profit margin is subtracted to reach the target cost of the product, and this method is completely opposite to the traditional cost management where the product cost is

determined first and then the profit margin is added. It is expected to eventually reach the selling price of the product (Hilton & Platt, 2011: 693-694).

Pricing method = cost + target profit margin.

The second principle / focus on the customer (Focus on Customer):

Management must know the preferences of customers and their reactions to the product and the price that suits them (Hilton, 2005: 649).

As seen by (Al-Rifai and Junaidi, 2006: 20), target cost systems are rationalized and guided by the Market Driven, and the voice of the customer is one of the important factors that are taken into account, and it should not be neglected during all stages, and it must also take into account all customer requirements in terms of quality and cost. and time together when making decisions about which product to produce, as well as guiding them when conducting cost analyses.

The Third Principle / Focus on Design of the Product:

This requires examining the aspects of the production process to ensure that the product is manufactured with the highest possible efficiency, using the possible methods to design all aspects of the production process according to the target cost of the product. (Yazdivar & Askarany, 2011:2-6)

The fourth principle / focus on the design of the production process (Focus On Design Of Production Process):

It means examining all aspects of the production process to ensure that the product will be manufactured with the highest possible efficiency, and all aspects must be designed according to the technique of the target cost of the product (Abdel Hafeez, 2008: 3).

The Fifth Principle / Multifunctional Team:

In order for the product to be produced at a cost equal to or less than the target cost, this requires the participation of people from different jobs in the company, bearing in mind that the job of these people is not limited to have to share

experiences, but they bear the responsibility for the entire production process (Hilton, 2002, 670-671).

The Principle Six / Costs of Product Life Cycle:

That all costs related to the life cycle of the product must be taken into consideration starting from the design and planning stage and ending with the after-sales stage (Clma, 2005: 4).

The Seventh Principle / Orientation Toward Value:

All parts of the value chain represent merchants, suppliers, distributors, and service providers involved in the stages of target cost technology, and long-term and mutually beneficial relationships with suppliers and other members of the value chain form the basis of target cost technology, and the value chain is like the large organization that participates in design information and cost information. They overlap in setting cost-cutting targets (Slater, 2010: 26).

4.2 Steps to implement the target costing technique :

The target costing technique can be implemented through a set of steps, as follows:

First –: Determining The Target Price :

It means that the price that the customer is willing to pay in exchange for products that can meet their needs and desires, this matter requires that customers have an understanding and awareness of the value of the product in comparison with the products provided by competitors, to determine the target selling price on the economic unit to conduct research and market studies regarding The characteristics and quality that the customer desires in line with the price that the customer is able to pay in exchange for the mentioned characteristics and quality, and accordingly, the target selling price is determined by the perceived value of the customer towards the product of the economic unit, and that this value is perceived according to the resources that the customer can sacrifice. In order to obtain a specific product that can satisfy his needs and desires without neglecting the selling prices offered by competitors (Horngren, Et.Al., 2015:523).

Second, Determining the Target Profit Margin –:

The second variable in the equation for determining the target cost is the financial return that the economic unit needs in order to survive in its business environment as well as growth and expansion. Thus, the target profit margin is determined in order to ensure the achievement of the plans for long-term profits in the economic unit (Cooper & Sagmulder, 1997: 100).

Third: Determining the Target Cost –:

(Horngren, Et.Al., 2015:523) mentioned that the target cost can be reached through the difference between the target selling price and the target profit margin, so the economic unit must work on designing its own products and processes within the limits of the target cost that has been determined, Taking into account the existing amount of quality if it wants to remain in the competition environment, and through the following equation, the target cost can be calculated

$$\text{Target Cost} = \text{Target Selling Price} - \text{Target Profit Margin}$$

Fourth –: Using Some Techniques To Reach The Target Cost :-

The target cost is less than the estimated cost of the products of the economic unit, due to the presence of many of these factors, and the most important of these factors are the pressures faced by the economic unit by customers or competitors to reduce product costs, and that increasing the estimated cost of the product over the target cost requires a cost reduction And that this reduction is done by using some techniques, the most important of which are the two Indian techniques of value and deconstructive analysis (Dekker & Smidit, 2003: 12), and these techniques can be clarified through the following:

1- The Value Engineering –:

It is a method to reduce cost and improve operational processes, which takes advantage of the information collected about the design of the product and then tests various characteristics of the design and processes to diagnose aspects of improvement, so value engineering is an effective tool in achieving the target cost entrance to its objectives by diagnosing appropriate ways to reduce the cost of the product during its life cycle. (Hilton & Platt, 2011:695-696).

2- Deconstructive Analysis (Tear Down) :-

It is the process of evaluating competitors' products in order to identify opportunities to improve the product and reduce costs. Where competitors' products are analyzed to determine their functions and designs and to provide a clear vision about the processes used in the production of each product and its manufacturing costs so that a kind of benchmarking is provided for the product of the economic unit with the competitors' products to introduce any modifications that have been made. Its note to the product of the economic unit to reduce costs (Salman, 378: 2010).

5.2 The Cost Leadership Strategy :-

It is the strategy that depends on the use of competitive advantage on the basis of the lowest cost by deleting and canceling every activity that does not add value to the market, and this strategy targets large markets so that it can price its products less than competitors with the ability to achieve a certain profit margin (Wheelen, & H.D. ,2002:148).

As mentioned again (Wheelen & Hunger, 2012: 209), it is a low-cost competitive strategy targeting the broad market, to attract the largest number of customers who rely on the low price, and the economic unit aims to achieve superiority over competitors by producing products at a cost less than the cost of competitors. This strategy has two advantages: the economic unit achieves a lower price than the competitors' prices while achieving the same profitability due to the lower costs associated with it and its ability to withstand severe competition better than competitors because of its lower costs, and for this the economic unit that follows this strategy achieves profits that exceed the average rate.

6.2 The Role of Target Costing Technique in Implementing Cost Leadership Strategy :-

The cost leadership strategy is considered to be the ability of the economic unit to produce at the lowest costs compared to its competitor (Horngren, Et.Al., 2000: 462), and thus includes all activities aimed at producing and delivering goods and services at the lowest cost compared to competitors, and at the level of quality that is acceptable to Before customers (Hitt, Et.Al., 2001: 155), since the dependence of the economic unit on the strategy of cost leadership enables it to achieve many

advantages represented in defensive strength against competitors through the lowest costs and continuing to achieve profits during periods of competition, and control of the possibility of Reducing selling prices and driving industry profitability more than the average and for a longer period of time (Al-Tikriti and Al-Jubouri, 282: 2001), and thus this is a strategy that helps the economic unit to gain profits as a result of the high market share, especially in markets where customers prefer low-cost products (Wheelen & Hunger, 2012: 185-186), and this strategy is based on a scientific assumption that the economic unit possesses a competitive advantage that enables it to carry out design, manufacturing, marketing and customer service operations at the lowest cost compared to competitors, which enables the economic unit to sell its products to customers at competitive prices lower than the prices offered by competitors, which leads to increased sales and market share (Wang, Et. Al., 2011:103).

The third topic: the practical aspect of research

1.3 An introduction to the General Company for Rubber Industries :-

The State Company for Rubber Industries is one of the formations of the Ministry of Industry and Minerals, and it was established in 1974 according to the Ministry of Industry and Minerals book No. No. (90) for the year (1970) amended by the name of the General Company for Rubber Industries in Al-Diwaniyah, with a capital of (15,000,000) and its headquarters in Al-Diwaniyah Governorate. An annual tire, its production includes saloon tires, medium load tires and large load tires, with (300,000) tubes. The company expanded through Project No. (2) where special tires were produced in 1983, and the company expanded during 1987 and completed in 1988, where The design capacity was (834,900) an annual tire and (1175,025) tubes, then the company's capital was modified to become (160,000,000) dinars as of 1/1/1988, when the company's capital was increased to reach (302,000,000) dinars in 1998.

2.3 Implementation Of Target Costing Technique of the wire frame size (24-1200) in the General Company for Rubber Industries :-

The current research will be applied in one of the laboratories of the General Company for Rubber Industries, and the research will be applied to the wireframe product, size (1200_24) because of its high cost, so the target cost technique will be applied, which requires doing four main steps: setting the target selling price, determining the target profit margin, and determining Target cost, and finally the application of continuous improvement technique in order to reduce costs, as shown below:

First, determine the target selling price:-

The target sale price is determined based on the perceived value of the customer towards the product of the economic unit or based on the average prices of competitors, the first method cannot be relied upon because of the inability to accurately identify the company's customers, so the second method was resorted to, which is to rely on the average selling prices of competitors For the wireframe product size (1200-24), and the competing products for the product in question were identified in terms of conducting a survey and field survey of the local market in which this product is sold in order to identify the competing products and their selling prices, and the following table shows the average selling prices of competitors for the wireframe product size (1200-24) :

No.	Competitor product name	Unit selling price (IQD)
1	Max sword	210.000
2	Jenny	320000
3	Grand Stone	214000
	TOTAL	744000
	÷ number of competing species	3÷
	= Average selling prices of competitors for wireframe	275000

Source: the company's marketing department and the field survey of market prices

The above table shows the most competitive products for the wire frame product, size (1200_24), and according to the company's management policy, the target sale price is determined on the basis of the average selling prices of competitors, so the target sale price of the product in question is 275000 (JD).

Second: Determine the target profit margin:-

The company's management wants to achieve a targeted profit margin for the wire frame product size (1200_24) at a rate ranging between 10% to 20% of the target cost, and due to the intense competition that this company is going through, it is preferable to choose the minimum target profit margin of 10% of the cost. targeted.

Third: Determine the target cost :-

The target cost can be determined by the difference between the target selling price and the target profit margin, and the target cost of the wireframe product size (1200-24) can be calculated as follows:

$$\text{Target cost} = \text{Target selling price} - \text{Target profit margin}$$

- **Target Selling Price = Target Cost + Target Profit Margin**

$$275000 = x + 0.10 x$$

$$275000 = 1.10 x$$

$$\therefore x = 275000 / 1.10$$

$$= 250000$$

It is clear from the above, that the target cost of the wireframe product (1200-24) is in the amount of 250000

The target sale price is 275,000 dinars, and the target profit margin for this product was 25,000 through (250,000×10%), noting that the total cost of this product was 275,466, and thus the gap between the total cost and the target cost amounted to 25,466 dinars (275,466-250000) The gap between the total cost of industrial costs was 13,781 dinars (263781 -250000), which is a negative gap, and the this gap and turn it into a positive gap, research one of the tools of the target costing techniaue should be applied to achieve the target reduction .

3.3 The role of target cost in implementing the cost leadership strategy in the State Company for Rubber Industries:

The application of the target cost technique in the research sample company has helped reduce the cost of the product, the wireframe size (1200_24) after the actual cost was 275,466 dinars, meaning that the amount of reduction in cost is 25,466 dinars, which indicates that the percentage reduction in the cost of this product 10%, and that this means reaching the target cost of 250,000 dinars, which helps in selling the product at

the target price of 275,000 dinars, and achieving a profit margin of 25,000 dinars, and all of these things are positive indicators that indicate the possibility of implementing a cost leadership strategy by making The company's product wire frame size (1200_24) bears a cost less than that of competitors, thus helping to attract price-sensitive customers and maintain them for the purpose of gaining new customers, and also increasing the market share.

Fourth topic: conclusions and recommendations

1.4 Conclusions:-

During this research, a number of conclusions were reached, the most important of which are the following:

1. The target cost technique is one of the strategic cost management techniques, which is concerned with profit planning and cost management, where the selling price of the product is the guide .

To cost by focusing on the customer and his desires, and thus it is an initiative to manage costs during the first stage of the product life cycle.

2. There are seven principles of target cost technology which are price drives the cost, focus on the customer, focus on product design, focus on production process design, also there is a multifunctional team, product life cycle costs, and finally orientation towards the value chain.

3. The General Company for Rubber Industries in Al-Diwaniyah suffers from a low level of actual production in recent years compared to the design, available and planned capacity, due to the deterioration of the company's financial situation, the lack of allocations for importing raw materials for production and the lack of sales.

4. The General Company for Rubber Industries followed techniques and an old method dating back to (1976), which have high costs.

5. Most of the raw materials used in the manufacture of tires are imported materials at a very high cost, which has a negative impact on the high costs of production.

2.4 Recommendations:-

1. It is necessary for the economic unit to reduce the selling prices of the product within the limits of competitive prices in order to obtain a greater share in the market.
2. Awareness and training of employees and workers in the economic unit of the target cost technology and the advantages it achieves in improving the efficiency of product pricing and reducing costs.
3. The management of the General Company for Rubber Industries should focus on the customer through conducting periodic research and studies of the market and involving customers and suppliers in the product design and development process, even indirectly, with the aim of producing products that fit the desires and needs of customers.
4. Seeking the assistance of scientifically and practically qualified persons in the field of accounting and specialists in modern accounting systems and techniques, and training accountants to apply them.
5. The need to highlight the role of the cost leadership strategy that enables companies to compete and stay in the market.

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